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PROGRAM LIBRARY

DECUS NO.	8-390
TITLE	PALEDCO (<u>PAL</u> ASSEMBLER AND <u>EDITOR</u> <u>COMBINED</u>)
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SOURCE LANGUAGE	PAL III

Note that since control returns to the editor after each pass, an error diagnostic can be attended to immediately, and the assembly can then be reinitiated.

Program Operation: Following a high-speed punch command (SR bit 10 = 1; type P/V), the editor examines SR bits 0 and 1. If both are 0, it punches. If either is 1, it interprets them as an assembly pass number, and transfers control to the assembler.

Summary of new commands and options:

Editor

Location 100000

Bit	Setting	Function
0	0 1	Input text as is Convert all occurrences of 2 or more spaces to a tab
1	0 1	Output each tab as 8 spaces Output each tab as tab/rubout

SR options

Bit	Position	Function
2	0 1	Output as specified Cease ongoing output and return to command mode
10	0 1	Low-speed punch and teleprinter High-speed punch (also used to indicate assembler request in conjunction with SR bits 0 and 1 as noted above)
11	0 1	Low-speed reader High-speed reader
0,1	1	Used to indicate desired assembler pass, when bit 10 is set and Punch command has been given.

Assembler

(from editor command mode, set SR, type P↵, and press Continue)

Switch Register Settings

Pass	Low-speed	High-speed
I	2002	2003
II	4002	4002 (turn on high-speed punch instead of low-speed punch)
III	6002	6003

/MODIFICATIONS TO PAL III AND EDITOR FOR PALEDCO
 /EDITOR IN UPPER; PAL IN LOWER
 CDF=6201
 CIF=6202
 RDF=6214
 RIF=6224
 RMF=6244
 RIB=6234
 FIXTAB

/
 /EDITOR MODIFICATIONS
 FIELD 1

		*0	
0000	0000	0000	/BIT 0 & 1 SR OPTIONS
0001	7730	7730	/TOP OF TEXT STORAGE
		*172	
0172	1156	1156	/PNTR TO MIDDLE /OF HI-SPEED /PUNCH ROUTINE
		*1104	
1104	1000	TAD 0	/GET SR OPTION
		*1154	
1154	5755	JMP I PALIII	
1155	7731	PALIII, 7731	
		*1445	
1445	1000	TAD 0	/GET SR OPTION
		*7731	
7731	3343	DCA SAVE	
7732	7404	OSR	
7733	0342	AND MASK	
7734	7640	SZA CLA	
7735	5344	JMP PALIN	
7736	1343	TAD SAVE	
7737	6021	6021	/CHECK FLAG
7740	5337	JMP .-1	
7741	5572	JMP Z I 172	/TO PUNCH
7742	7000	7000	
7743	0000	0	

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7744	1343	PALIN,	TAD SAVE
7745	7000		NOP
7746	3371		DCA ASCII
7747	1376		TAD STARTF
7750	7650		SNA CLA
7751	5355		JMP SETPAL
7752	1371	PALOUT,	TAD ASCII
7753	6203		CIF CDF 00
7754	5774		JMP I PAL
7755	2376	SETPAL,	ISZ STARTF
7756	6203		CIF CDF 00
7757	5775		JMP I START
7760	1372	CHAR,	TAD CIFLAG
7761	7640		SZA CLA
7762	5773		JMP I EDITR
7763	2372		ISZ CIFLAG
7764	5352		JMP PALOUT
7765	7300	CLEAR,	CLL CLA
7766	3372		DCA CIFLAG
7767	3376		DCA STARTF
7770	5177		JMP 177
7771	0000	ASCII,	0
7772	0000	CIFLAG,	0
7773	1157	EDITR,	1157
7774	1404	PAL,	1404
7775	0200	START,	200
7776	0000	STARTF,	0
7777	5365	ENTER,	JMP CLEAR

/PAL III MODIFICATIONS
FIELD 0

0241	5642		*241
0242	7600	PASS,	JMP I PASS
			7600

1401	6213		*1401
1402	5603		CIF CDF 10
1403	7760	EDIT,	JMP I EDIT
			7760

7600	6213	PASSD,	*7600
7601	5602		CIF CDF 10
7602	7765	PCLEAR,	JMP I PCLEAR
			7765

ASCII	7771
CHAR	7760
CLEAR	7765
CIFLAG	7772
EDIT	1403
EDITR	7773
ENTER	7777
MASK	7742
PAL	7774
PALIII	1155
PALIN	7744
PALOUT	7752
PASS	0242
PASSD	7600
PCLEAR	7602
SAVE	7743
SETPAL	7755
START	7775
STARTF	7776

